

# MPATC Course Offerings

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2010-2011 School Year

**Mt. Pleasant Area Technical Center**

[www.mpatc.com](http://www.mpatc.com)





# **MT. PLEASANT AREA TECHNICAL CENTER**

1155 S. Elizabeth St., Mt. Pleasant

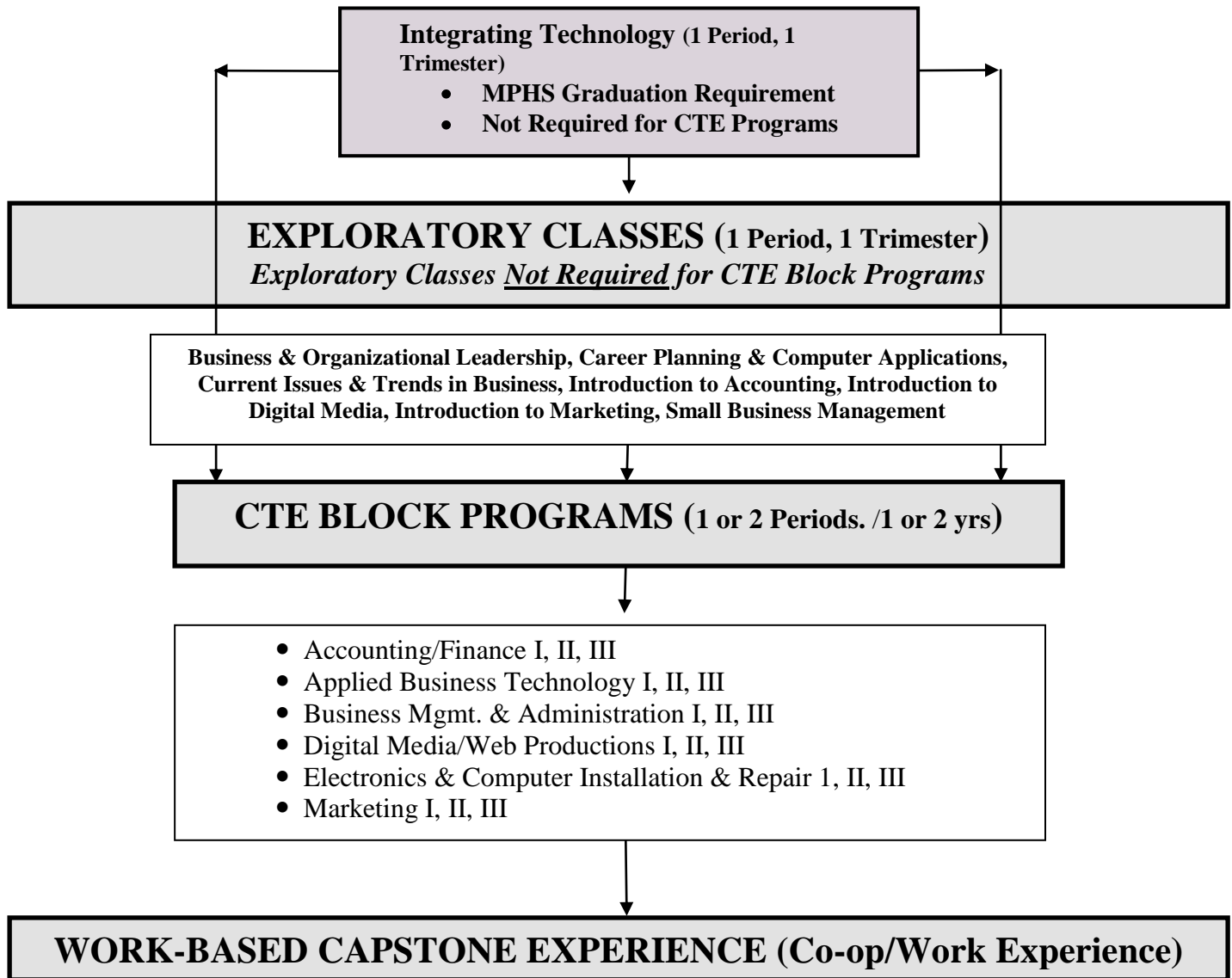
(989) 775-2210 • (888) GO-MPATC • [www.mpatc.com](http://www.mpatc.com)

The Mt. Pleasant Area Technical Center Academic Integration Committee is currently developing an entrepreneurial math curriculum for students enrolled in CTE Block programs to satisfy the 4<sup>th</sup> year math requirement. Several programs have been aligned to meet requirements for Visual/Performing and Applied Arts credit.

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# BUSINESS, MANAGEMENT, MARKETING, AND TECHNOLOGY



\*\*\*The BMMT Curriculum for Mt. Public Schools has been aligned K-12 and meets the National and Michigan Education Technology Standards.

\*\*\*CTE courses will prepare students for job entry and/or articulated course credits at several Michigan colleges. See [www.mpatc.com](http://www.mpatc.com) for more information or call 775-2210.

*MT. PLEASANT AREA TECHNICAL CENTER*  
**BUSINESS, MANAGEMENT, MARKETING, AND TECHNOLOGY**

Course Title Grade Level	Prerequisite Year Length	Content
<b>Career Planning &amp; Computer Applications (CPCA)</b> (9)	<i>None</i> <i>1 Trimester</i>	<p>This course is designed to assist students with social, personal, academic and career issues that may impact future success. Units of study include career planning, goal setting, decision-making, communication, interpersonal relationships, organization, time management, learning styles, study habits and the overall transition to high school. Technology is interwoven into all aspects of this course.</p> <p><b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b></p>
<b>Integrating Technology</b> (9,10,11,12)	<i>None</i> <i>1 Trimester</i>  <b>*Graduation Requirement</b>	<p>This course continues to build on the use of technology, and the use of software and computers as a tool in learning. Advanced word processing, spreadsheet, database, desktop publishing, graphics, multimedia, and website design and development will be used. Personal skills and traits needed in the high-tech world will be emphasized. Career exploration and portfolio development will be part of the curriculum.</p> <p><b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b></p>
<b>Business &amp; Organizational Leadership</b> (9,10,11,12)	<i>None</i> <i>1 Trimester</i>	<p>This course covers the concepts and practices of leadership through the examination of the difference between management and leadership, organizational culture, and the leader-follower relationship. Students will have an opportunity to apply the ideas and ideals from several philosophies in developing and expanding their own views of leadership and with their participation in a variety of leadership projects.</p> <p><b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b></p>
<b>Current Issues &amp; Trends in Business</b> (9,10,11,12)	<i>None</i> <i>1 Trimester</i>	<p>This course will take a look at the correlation between historical events and the impact on business in a variety of industries such as music, automotive, restaurant, clothing and textiles, TV/movie, technology and supermarket. Students will examine case studies to explore current issues and trends in business.</p> <p><b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b></p>
<b>Small Business Management</b> (10,11,12)	<i>None</i> <i>1 Trimester</i>	<p>Students will become entrepreneurs as they create and operate a company that will produce and market its own products and/or services. The student company allows for students to become shareholders and to gain leadership skills and to share in risk-taking, decision-making, problem solving, accounting, production, human resources, marketing, and other experiences that take place in operating a successful business.</p> <p><b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b></p>

**MT. PLEASANT AREA TECHNICAL CENTER  
BUSINESS, MANAGEMENT, MARKETING, AND TECHNOLOGY**

Course Title Grade Level	Prerequisite Year Length	Content
<b>Introduction to Digital Media</b> (9, 10, 11, 12)	None 1 Trimester	The Introduction to Digital Media course will focus on basic digital graphic design, multimedia applications, and animation basics. The class is taught using a “hands-on” project based approach. Industry standard software (PhotoShop, Flash, Fireworks, etc.) will be used to complete real-world projects. <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b>
<b>Digital Media/Web Production I,II,III</b> (9, 10, 11, 12)	None Full Year 1 or 2 Periods	<p>The Digital Media/Web Productions program will be taught using a “hands-on” project-based approach to the world of information technology. Industry standard software (Photoshop, Flash, Fireworks, SoundBooth, Illustrator, Dreamweaver, Premiere, Bryce, Maya, etc.) will be used to complete real-world projects. The program is divided into twelve segmented and sequential modules:</p> <ol style="list-style-type: none"> <li>1) Information Technology and the Internet</li> <li>2) Multimedia (Photoshop, Illustrator)/Web Browsing</li> <li>3) Web Search Technology</li> <li>4) Electronic Communications</li> <li>5) Internet Security</li> <li>6) Intro. To Web Site Design (Dreamweaver, Contribute)</li> <li>7) Intermediate Web Site Design (Dreamweaver, XHTML)</li> <li>8) Image Techniques/Animation (Flash, Bryce, Premier)</li> <li>9) Advanced Web Site Design/E-Commerce</li> <li>10) Introduction to Network Technology</li> <li>11) Advanced Network Technology</li> <li>12) IT Project Management</li> </ol> <p>The goal of the program is to provide comprehensive skills in the use of information technology and be able to successfully pass the CIW (Certified Internet Web) Foundations Exam. <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b></p>
<b>Introduction to Marketing</b> (9,10,11,12)	None 1 Trimester	This course introduces students to the basic functions of Marketing. Entry-level retailing components are developed in the areas of communication, human relations, mathematics, and store operation. Time is also spent developing cashier skills in the MPATC store “ <b>The School Store</b> ”. <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b>
<b>Marketing I,II,III</b> (10,11,12)	None Full Year 1 or 2 Periods	Students interested in business careers will develop practical marketing skills in this block. Class projects in retail, sport/entertainment, and hospitality/tourism industries require students to apply marketing concepts such as product design, distribution, buying, merchandising, logistics, market research, pricing, quality service, advertising, public relations and promotion. Students learn real-life experience working in the “The School Store” and planning special events. Advanced students are challenged to act as organizational business leaders, taking on supervisory and management roles. Students are responsible for applying previously learned marketing principles to real-life experiences in “The School Store” and the organization of special events. This class includes hands-on instruction of global marketing, e-business, promotional sponsorships and more. Completion of this course will prepare students for job entry <b>and/or</b> articulated course credits at several Michigan colleges. See <a href="http://www.MPATC.com">www.MPATC.com</a> for more information or call 775-2210. <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b>

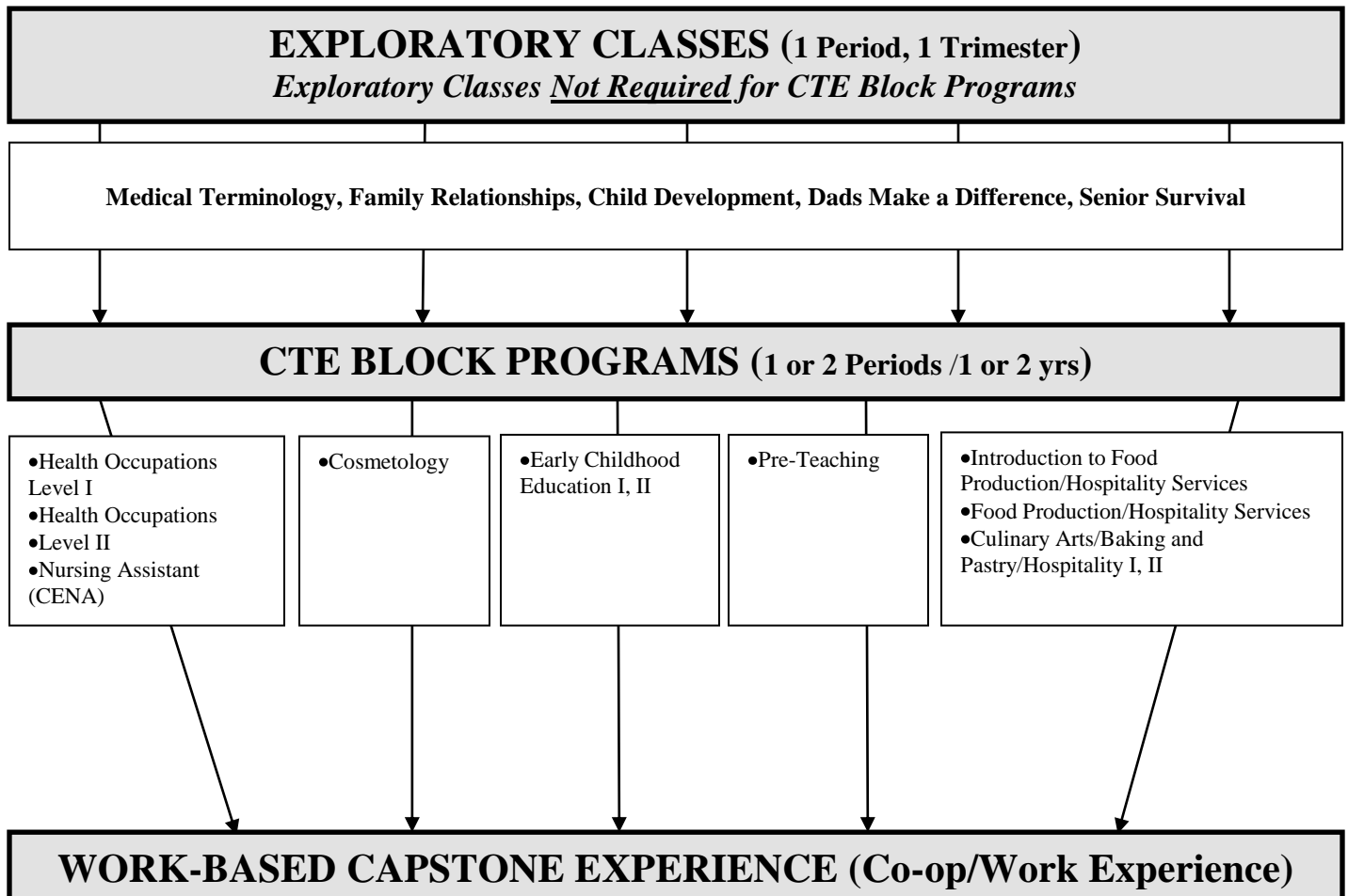
**MT. PLEASANT AREA TECHNICAL CENTER**  
**BUSINESS, MANAGEMENT, MARKETING, AND TECHNOLOGY**

Course Title Grade Level	Prerequisite Year Length	Content
<b>Introduction to Accounting</b> (9,10,11,12)	None 1 Trimester	This course introduces students to the basic accounting cycle. They will learn to set up an account system, analyze transactions into debits and credits, journalize and post transactions, and report to interested users; such as clients, investors or bankers. Students also will learn to plan adjusting entries on a worksheet and complete end-of-fiscal period work for both proprietorships and partnership. <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b>
<b>Accounting/ Finance I,II,III</b> (9,10,11,12)	None Full Year 1 or 2 Periods	This career oriented course in manual and automated accounting is designed for students who plan to enter <b>any area of business</b> after graduation. Topics covered include the accounting cycles of service organizations and merchandisers focusing on the recording of business transactions and the preparation of financial statements for such organizations. This curriculum is project based with an emphasis on problem-solving. There are also a number of team building activities. Advanced topics include corporate accounting, managerial accounting, cost accounting, tax accounting, and auditing. Math credit may be earned through the credit waver option. Completion of this course will prepare students for job entry <b>and/or</b> articulated course credits at several Michigan colleges. See <a href="http://www.MPATC.com">www.MPATC.com</a> for more information or call 775-2210. <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b> <b>*This course will satisfy a 4<sup>th</sup> year math credit for the Michigan High School Merit Curriculum.</b>
<b>Applied Business Technology I, II,III</b> (10,11,12)	None Full Year 1 or 2 Periods	This course offers opportunities to explore and prepare students for specific entry-level business services and information occupations, such as: Executive Assistant, Medical Transcriptions, Legal Assistant, Data Entry Specialist, Office Manager, Communications Equipment Operator, and Desktop Publisher. Students will use application software as a tool to process any component of business operations. Curriculum is project based with online components. Students will continue to develop technology operations and concepts needed in business. Skills will include records management, project management, and financial records concepts. Advanced students will have opportunity to participate in real-life experiences associated with technology-related careers. Completion of this course will prepare students for job entry <b>and/or</b> articulated course credits at several Michigan colleges. See <a href="http://www.MPATC.com">www.MPATC.com</a> for more information or call 775-2210. <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b>
<b>Business Management and Administration I, II,III</b> (10,11,12)	None Full Year 1 or 2 Periods	Business Management and Administration (BMA) is an advanced level business course that focuses on the opportunities and challenges of managing a business in the free enterprise system. This curriculum is project based with an emphasis on teamwork, problem-solving and communications. BMA will also focus on management theory, human resource management and behavior, finance, purchasing, logistics, and production. The student company allows for students to become shareholders and to gain leadership skills and to share in risk-taking, decision-making, problem solving, accounting, production, human resources, marketing, and other experiences that take place in operating a successful business. A career in BMA encompasses planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations. Completion of this course will prepare students for job entry <b>and/or</b> articulated course credits at several Michigan colleges. This course is strongly recommended for any student planning a business career. See <a href="http://www.MPATC.com">www.MPATC.com</a> for <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b>

*MT. PLEASANT AREA TECHNICAL CENTER*  
**BUSINESS, MANAGEMENT, MARKETING, AND TECHNOLOGY**

Course Title Grade Level	Prerequisite Year Length	Content
<b>Electronics &amp; Computer Installation &amp; Repair I</b> (10,11,12)	<i>None</i> <i>Full Year</i> <i>2 Periods</i>	<p>This course combines online training with hands-on classroom labs. Computer repair training is designed to prepare the student for Comptia A+ certification. The learner will work with installation, configuration and upgrade of computers hardware and operating systems. Computer programming skills using Microsoft VB 2005 and Parallax PBasic are included in this course. Car stereo systems are used to understand the basics of modern electronics with a focus on the skills required to become certified as a Mobile Electronics Certified Professional (MECP). The student will investigate the electronic components that are used in amplifiers, speakers, and car stereo equipment.</p> <p>A group project provides the opportunity to apply these skills. The career focus of this class is on learning the skills needed to be an Installer or Repair Technician. <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b></p>

## LIFE MANAGEMENT OFFERINGS



*MT. PLEASANT AREA TECHNICAL CENTER*  
**LIFE MANAGEMENT OFFERINGS - COSMETOLOGY**

In this course, learners study the science involved and develop the skills necessary for the care of the hair, nails, and skin. Included are areas of cutting, styling, waving of the hair, facial treatment, and application of cosmetics. Human anatomy, physiology, histology, and bacteriology are covered in the course content.

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<p><b>Cosmetology</b> (11, 12)</p>	<p><i>Recommended classes: Art, Biology, Chemistry, English, and Math. (See your counselor for details.)</i></p> <p><i>Full Year 2 Periods and Summer</i></p>	<p><b>Two options are available in the Cosmetology program.</b></p> <p><b>Option 1:</b> High school students begin the summer after their sophomore year and attend ten weeks the first summer. In the fall, three hours are scheduled for the class. For the summer and their junior year in high school, students will receive three credits. The second summer will be scheduled with the Cosmetology School and Technical Center and will be from six to ten weeks. In the senior year of high school students are required to schedule three hours a day until completion. Cosmetology hours are between 8:30-4:30 so an extended school day is an option. A total of six credits is earned upon satisfactory completion.</p> <p><b>Option 2:</b> (Requires payment of remaining hours by participant if the program is completed after graduation from high school). High school students begin the summer after their JUNIOR year and will complete the 1500 hour program after graduation from high school. Students will attend for ten weeks the first summer, seven hours per day, five days a week. When school begins in the fall, they will attend three hours per day. <b>UPON GRADUATING FROM HIGH SCHOOL, STUDENTS BECOME FULL-TIME STUDENTS AT MJ MURPHY BEAUTY COLLEGE AND WILL PAY TUITION UNTIL COMPLETION.</b> (The hourly rate of tuition will be the rate of MJ Murphy Beauty College less the registration fee), Pell grants and other income based assistance may apply for the post graduate portion.</p> <p>Under either option, students become eligible to work with patrons in the beauty college after satisfactory completion of 350 clock hours. (All work is performed by supervised senior students). In order to be licensed by the State, the learner must complete 1500 clock attendance hours. At the time of completion, the student will be eligible to take the State Board Examination.</p> <p>Students are required to complete an application registration as a student with the State of Michigan, Board of Cosmetology before entry into the program. The application requires a small fee, a signature, and includes information on education. This form will be available at cosmetology orientation.</p> <p>This course will be taught at the MJ Murphy Beauty College in Mt. Pleasant and continuance of the program is dependent upon a continuing contractual agreement with the Area Technical Center. The MJ Murphy Beauty College is accredited by the National Accrediting Commission of Cosmetology Arts and Sciences, certified by the U.S. Department of Education.</p> <p>The Cosmetology School requires students to furnish their own uniforms and shoes, and to pay the state registration fee. As this program does not fit the standard transportation matrix, parents need to be advised of the additional commitment to summer and other transportation requirements.</p>

**MT. PLEASANT AREA TECHNICAL CENTER**  
**LIFE MANAGEMENT OFFERINGS- EARLY CHILDHOOD EDUCATION**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Family Relationships</b> (9,10,11,12)	<i>None 1 Trimester</i>	This is a one-trimester course that deals with the individual and the family. This course is designed to help students make personal decisions about their futures. Topics covered are families, dating, mate selection, weddings, marriage, human reproduction, pregnancy and prenatal care, labor and childbirth (empathy belly).
<b>Child Development</b> (9,10,11,12)	<i>None 1 or 2 Trimesters or Full Year</i>	This class is designed to help students understand the growth and development of children from new born to school age. Topics such as parenting, family concern and crisis, children's education and health will be covered.  This course is strongly recommended for every high school student who plans on being a parent someday, and for those who will be taking Early Childhood Education or Pre-Teaching.
<b>Dads Make a Difference</b> <i>Male Only Child Development</i> (9,10,11,12)	<i>None 1 Trimester  Male Only</i>	This class is designed to help male students understand the many roles a father plays in a family. Male students will be introduced to a wide range of topics designed to prepare them for future responsibilities, which include dating, relationships, marriage, parenting, pregnancy (empathy belly), and child development (Baby think it over). This class is strongly recommended for male students who plan on becoming a teacher, coach, social worker or father.
<b>Senior Survival (Consumer Economics)</b> (11,12)	<i>None 1 Trimester</i>	This is a one-trimester course designed to prepare students to live on their own. The student will learn about personal decisions and what consequences each decision has in their personal life. The class will cover personality development, getting along with yourself and others, personal commitments, money management, banking, credit cards, budgeting your income, and dimensions of families.
<b>Early Childhood Education</b> (11,12)	<i>None Full Year 2 Periods</i>	This class prepares students to work in careers involving children and families. These include positions in child care, human services, health or elementary education, and family day care. The core academic area of language arts is strongly emphasized through readings, student developed lesson plans, projects, resource files and portfolios. Online learning is incorporated using classroom laptops.  This class offers hands-on experience in a children's learning laboratory, as well as classroom instruction. In this program the student will: <ol style="list-style-type: none"> <li>1. Work as a teacher assistant.</li> <li>2. Plan, prepare materials, and present activities for children in the lab, including: art, science, table toys, pretend, and group time with stories, music, and games.</li> <li>3. Become certified in CPR, First Aid, and Blood borne pathogens.</li> <li>4. Gain an understanding of pre-schoolers' development and practice guiding them in appropriate ways.</li> <li>5. Improve personal characteristics and teamwork skills that will enable the student to effectively work with children.</li> <li>6. Work in the community at a work site, such as an elementary classroom, group day care center, special needs program, Head Start, or related site.</li> </ol> <p>Once competent, students will work three days a week in a field site in their own town such as those mentioned above. (Note: Some colleges will count this field experience towards the observation hour requirement for a teaching degree).</p> <p>Students may articulate the introductory Early Childhood Education course at Mid Michigan Community College, Ferris State University, Delta College, Baker College, and Montcalm Community College. This includes FREE CREDITS and bypassing the intro class.</p> <p>To work with children more than (4) hours each week, the Department of Human Services requires a physical exam, signed by a physician, a negative TB test, and if 18, a Central Registry Clearance before entering the lab. A SCHOOL PHYSICAL IS ACCEPTABLE.</p> <p><b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b></p> <p><b>*This course qualifies for Visual/Performing/Applied Arts Credit.</b></p>

**MT. PLEASANT AREA TECHNICAL CENTER  
LIFE MANAGEMENT OFFERINGS – E.C.E. & PRE-TEACHING**

Two tracks are available for second year students. Ferris State University will award up to seven credit hours to eligible students who have successfully completed the two year program.

**Track I: Early Childhood Education** – for students who plan to work in a Day Care setting or teach pre-school, kindergarten or lower elementary.

**Track II: Pre-Teaching** – for students who plan to teach elementary through high school.

Course Title Grade Level	Prerequisite Year Length	Content
<b>Early Childhood Education II</b> (12)	<i>Early Childhood Education I</i> Full Year 2 Periods or Any Trimester	<p><b>EARLY CHILDHOOD EDUCATION II</b></p> <p>This course is designed for students who have successfully completed Early Childhood Education I, who wish to pursue their Child Development Associate credential (CDA). The core academic area of language arts is strongly emphasized as they write their competency goals and create their resource files and portfolio. It builds upon the fundamentals learned in Early Childhood Education I. Areas of study are in the form of computerized and individualized instruction. On-site evaluation of field work performance in childcare centers or elementary classrooms, the development of resource files, and the study of early childhood principles are all part of this program. Students work in a classroom or daycare setting depending upon their career goals. CPR, First Aid, and blood borne pathogen certification will be renewed. Co-op opportunities to work at day care facilities are available to qualifying second year students.</p> <p>Students may articulate up to 12 credit hours at Baker College by completing their CDA. This means bypassing several classes and FREE CREDITS. All field work hours can count as part of the 480 hour requirement for the CDA credential.</p>
<b>Pre-Teaching</b> (11,12)	<i>None</i> Full Year 2 Periods	<p><b>PRE-TEACHING</b></p> <p>In response to the projected national teacher shortage, this course is being offered to expand options for students interested in teaching. The student will gain a realistic understanding of teaching as a career. Pre-Teacher training provides each student with an opportunity to work with the classroom teacher to learn the reality of teaching and teaching skills. Students will be placed in their home communities with an assigned mentor teacher. They will meet with the instructor on Mondays and spend Tuesday through Friday in the classroom.</p> <p>Eleventh and twelfth graders may apply to the teacher-training program. The student must have good attendance and be in good standing at their home school. The student must complete an application for admission. A letter of recommendation and a counselor evaluation are also required. A committee made up of teachers, counselors and an administrator will review the application documents and students will be notified of their acceptance.</p> <p>Students may articulate 3 hours with Ferris State University. Students may also receive a 45 hour Pre-Professional Experience Waiver.</p> <p><b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b></p>

*MT. PLEASANT AREA TECHNICAL CENTER*  
**LIFE MANAGEMENT OFFERINGS – FOOD SERVICES**

Hospitality/Food Services is one of the fastest growing industries in the world. Students gain practical “hands-on” experience, knowledge, and skills through a competency based program. The basics of food preparation, food safety and sanitation, customer service, cost accounting, food cost, and foods marketing are covered. Students will develop the skills needed over the course of their high school years to further their education at a Culinary School or to obtain an entry-level position in the foods industry. Students are required to wear a chef hat and jacket that is provided by the MPATC.

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Introduction to Food Production /Hospitality Services</b> (9,10,11,12)	<i>None Full Year 1 Period</i>	The focus of this beginning course is geared towards the basic food service and hospitality fields. Knowledge of safety, sanitation, cleaning, measurements, equipment, and foods and hospitality terminology is the foundation for this career field. The class introduces basic food handling and preparation, and baking. Students are also introduced to dining room and banquet services as well as the hospitality industry.
<b>Food Production /Hospitality Services</b> (10,11,12)	<i>None Full Year 1 Period</i>	The focus of this course is geared towards the basic food service and hospitality field. Knowledge of safety, sanitation, cleaning, measurements, equipment, and foods and hospitality terminology is the foundation for this career field. The class serves as an introduction to basic food handling, and preparation, dining room and banquet services. Students will also be introduced to the hospitality industry.
<b>Culinary Arts /Baking and Pastry /Hospitality Services I &amp; II</b> (11,12)	<i>Introduction to Food Production /Hospitality Services or Food Production /Hospitality Services Full Year 2 Periods</i>	This course will focus on Culinary Arts (fine foods design and production), full service dining, and fine dining service, as well as extensive banquet and catering service. The students will participate in menu planning and food inventory, ordering and stock rotation. Students also learn basics in ethnic food styles. This course is designed to teach students more detailed aspects of the industry.
<b>Food Production /Hospitality Services Co-op</b> (11,12)	<i>Related Food Production /Hospitality Services class Full Year 2 Periods</i>	This opportunity is designed for students who have developed entry-level job skills in the Food Production/Hospitality Services Industry and wish to be placed on jobs at local businesses. An individual training plan will be set up by the Co-op Coordinator in conjunction with the employer and related class instructor.

*MT. PLEASANT AREA TECHNICAL CENTER*  
**LIFE MANAGEMENT OFFERINGS – HEALTH OCCUPATIONS**

Instruction for the Health Occupations classes takes place in both the classroom and the community. Medical co-op placements are available for qualified students. In health care settings students begin completing documented patient contact hours required for admission into many post-secondary medical training programs.

For students preparing for a health career, the following courses are also recommended: Algebra, Chemistry or Physics, and Advanced Biology.

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Medical Terminology</b> (10,11,12)	<i>None 1 Trimester 1 Period</i>	Train for the hottest jobs in the 21st century. Health care and human service careers have a great future. This class will help you prepare for these “in demand” positions. This course will provide instruction in medical vocabulary and basic human anatomy as it relates to health and disease. This knowledge will prove valuable in everyday life as well as careers in the medical field, psychology, health fitness, animal care, physical education, special education, dental, pharmacy, child care, and social work. There is an On-line Medical Terminology class available for students who want to complete a second trimester which satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.
<b>Health Occupations Level I</b> (10,11,12)	<i>None Full Year 2 Periods</i>	This course is designed to develop and/or gain knowledge about the diverse occupational opportunities in the Health Care field. After completion of a universal core curriculum, job shadowing/observational experiences will be arranged. These experiences will be geared to student interests or career goals. Examples of areas of study are: First Responder, Sports Medicine, Veterinary, Alternative healthcare, Ophthalmology, Pharmacology, Lab, and Radiology.  <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b>
<b>Health Occupations Level II</b> (Previously LPN/RN Ladder) (11,12)	<i>Health Occupations Level I or Nursing Asst. (CENA) 1,2, or 3 Trimesters 2 Periods</i>	The goal of this program is to develop well-prepared candidates for post secondary health care programs. Students will explore career options through the use of instructional modules dealing with such topics as: pharmacology, laboratory assistant, physical therapy aide, nursing and radiology aide. Job shadowing and real world experiences will be arranged in areas relating to students’ interests. Students in this program will acquire the necessary skill levels, attitudes and experiences that will lead them to a carefully researched and developed career choice.  Hospitals, clinics and long term care facilities require a negative TB test, immunization record, and a physical exam that has been signed by a physician. A CURRENT SCHOOL ATHLETIC PHYSICAL IS ACCEPTABLE.  <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b>

*MT. PLEASANT AREA TECHNICAL CENTER*  
**LIFE MANAGEMENT OFFERINGS – HEALTH OCCUPATIONS**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Nursing Assistant (CENA, CNA)</b> (11,12)	<i>None</i> <i>Full Year</i> <i>2 Periods</i> <b>*Must Attend First Trimester</b>	<p>This course will lead to State Certification as a nursing assistant, following completion of a universal core curriculum, laboratory practice, a supervised clinical experience and successful completion of the State CNA test. This clinical experience will take place in long term/extended care facilities and must include a minimum of 30 hours.</p> <p>There is a large job market for Certified Nursing Assistants.</p> <p>This is an opportunity to gain the “previous experience” asked for on many employment applications. CNA employment also meets many requirements requested by post secondary health career programs.</p> <p>Hospitals, clinics and long term care facilities require a negative TB test, immunization record, and a physical exam that has been signed by a physician. A CURRENT SCHOOL ATHLETIC PHYSICAL IS ACCEPTABLE.</p>
<b>Co-op Related Nursing /Health Occupations</b> (12)	<i>Nursing Assistant or Health Occupations</i> <i>1, 2, or 3 Trimesters</i>	<p>This course is correlated with cooperative training in the area health fields. Areas of study will be in the form of individualized instruction with subject concentration in the area in which the learner is employed. Time must be scheduled for cooperative training. Cooperative training applications must be filled out and on file with the Area Center. A time will be set up for an interview with the Teacher/Coordinator.</p>

**MT. PLEASANT AREA TECHNICAL CENTER  
TRADE AND INDUSTRY OFFERINGS - AGRISCIENCE**

Today's agriculture includes occupations dealing with the production, servicing, and marketing of food and fiber. This training will use the student's background and abilities for placement in agricultural-related occupations. Agriculture classes are offered on an alternating-year basis. Students will take either Animal Science or Plant/Soil Science AND either Agriculture Business Management, Farm Mechanics, or Greenhouse and Landscape Management. This program requires the first three hours of the school day. (CLASSES ARE OFFERED AT ALMA HIGH SCHOOL)

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Agriscience - Animal Science</b> (11,12)	<i>None Full Year 2 Hours</i>	This course is designed for the student who is interested in agriculture and/or science. The course covers animal digestion, nutrition, reproduction and genetics. It also covers animal production, feeding, housing, disease control in the following: beef, dairy, equine, swine, sheep and small animals. Class work is supplemented by hands-on experiences and field trips. The leadership emphasis is on Parliamentary Procedure in order that students might participate in FFA.
<b>Agriscience - Plant/Soil Science</b> (11,12)	<i>None Full Year 2 Hours</i>	This course is designed for the science and/or agriculturally oriented student. It covers soil formation classification, organic matter, plant and animal life in the soil, how plants grow, liming soils, chemical and organic fertilizers, soil and water conservation and land judging. These concepts will be applied to all crops raised in Gratiot County. Instruction will be in class with field trips and laboratory experience used for skill development. Leadership emphasis will be on public speaking which will provide for participation in FFA.
<b>Agricultural Business Management</b> (11,12)	<i>None Full Year 2 Hours</i>	This is an advanced class for the agricultural oriented student. It pulls together the basic information from animal science and soil and crop science into a management class in preparation for careers in agriculture. This class will teach students acceptable accounting and business procedures to be used in farm related activities.
<b>Farm Mechanics</b> (11,12)	<i>None Full Year 2 Hours</i>	This course covers basic welding, engine up-keep/repair and other mechanical problems that might be needed by a person entering a general or specialized farm operation.
<b>Greenhouse &amp; Landscape Management</b> (11,12)	<i>None Full Year 2 Hours</i>	This is a course for students interested in advanced plant growth and propagation. This course will include botanical classification, plant physiology and reproduction, soils and soil preparation, plant growth requirements, basic greenhouse construction and operation principles, basic floriculture and basic landscape design and construction.
<b>Leadership in Agriculture</b> (11,12)	<i>None Full Year 2 Hours</i>	This course will provide students with an understanding and execution of practical leadership skills that aid in planning and implementing an organization. Emphasis is on leadership management, role of individuals within an organization and team building concept. The student will develop public speaking, parliamentary procedure and presentation skills. The students will also complete several inventories and surveys to assess their leadership style. The students will do in-depth studies of local groups and their organizational structure.

*MT. PLEASANT AREA TECHNICAL CENTER*  
**TRADE AND INDUSTRY OFFERINGS – AUTOMOTIVE TECHNOLOGY**

Course Title Grade Level	Prerequisite Year Length	Content				
<b>Exploring the Automobile</b> (9,10,11,12)	<i>None</i> <i>1 Trimester</i>	<p>This class is designed for the student who is interested in learning more about the automobile and how it works. It is a great class for students interested in Auto Technology. Students will spend time in both the classroom and lab gaining basic knowledge of the automobile. Students will spend time on the following topics: shop safety, tools and usage, basic automotive systems, general auto service, oil changing, cooling system service, bulb replacements, battery service, tire service, muffler service, paint touch up, waxing, interior clean-up, and engine compartment clean-up.</p>				
<b>Auto Technology I &amp; II</b> (10,11,12)	<i>None</i> <i>Full Year</i> <i>2 Periods</i>	<p>This program follows the curriculum of the National Automotive Technician's Education Foundation (NATEF). The following four areas are covered in the two-year program, two areas each year:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%; text-align: center;">Steering and Suspension Engine Performance</td> <td style="width: 40%; text-align: center;">School years: 2010-2011, 2012-2013</td> </tr> <tr> <td style="text-align: center;">Brakes &amp; Electrical</td> <td style="text-align: center;">2011-2012, 2013-2014</td> </tr> </table> <p><b>STEERING &amp; SUSPENSION</b> This portion of the curriculum covers steering systems. Skill development will focus on steering, suspension, and four wheel alignment.</p> <p><b>ENGINE PERFORMANCE</b> Students will study basic electricity and magnetism, fundamentals of electronics, basic ignition, fuel, and emission systems. Instruction will also include throttle body and multi-port fuel injection systems, distributorless ignition systems and OBD II operation and service. The students will perform operational tests on late model cars using scan tools and other test tools as well as drivability testing and troubleshooting on late model cars.</p> <p><b>BRAKES</b> Skill development in this area will focus on drum, disc, hydraulic, power assist, and anti-lock brake systems.</p> <p><b>ELECTRICAL</b> In this program the student will learn fundamentals and applications in automotive electrical, electronics, voltage, current, resistance, series and parallel circuits, magnetism, application of Ohm's Law, and wiring diagrams. Lighting systems, instruments, warning devices, horn, and other accessory circuits using wiring diagrams are covered, as well as skills in diagnosis, adjustment and repair of accessory and convenience circuits.</p>	Steering and Suspension Engine Performance	School years: 2010-2011, 2012-2013	Brakes & Electrical	2011-2012, 2013-2014
Steering and Suspension Engine Performance	School years: 2010-2011, 2012-2013					
Brakes & Electrical	2011-2012, 2013-2014					

*MT. PLEASANT AREA TECHNICAL CENTER*  
**TRADE AND INDUSTRY OFFERINGS - BUILDING TECHNOLOGY**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Exploratory Woodworking</b> (9,10,11,12)	<i>None 1 Trimester</i>	Woodworking provides up-to-date information about wood and wood products and instruction in the use of hand and power tools in the woodworking field. It offers experience which gives the student an insight into major areas of woodworking. The practical approach to design supplies guidelines which the student may apply to construction activities. Product design and construction of individual projects is focused on. Success in this area is assured by the use of many special set-ups, jigs, and devices.  Pine is supplied for reasonably sized projects; students will be charged for projects using hardwoods (oak, maple, etc.).
<b>Woodworking</b> (10,11,12)	<i>None 2 Trimesters</i>	This course is designed to help students become familiar with basic woodworking procedures, equipment, and methods. The course provides the opportunity to learn about various wood joints, types of finishes, cabinet making and woodworking tools. Much of the time is spent on individual projects.  Pine is supplied for reasonably sized projects; students will be charged for projects using hardwoods (oak, maple, etc.).
<b>Building Trades I</b> (10, 11, 12)	<i>None Full Year 2 Periods</i>	This course will expose students to the construction field. It will focus on the following areas: safety, tool use, methods of construction, foundation layout, wall and floor framing, roofing, stair construction, drywall, trim work, siding, and materials used in residential construction. This class may also touch on codes and inspections, blueprint reading, masonry, and other areas of interest. This class will allow participants to prepare for employment possibilities as well as developing valuable life skills. Students will have hands-on experience in house building and/or shed construction. Clothing suitable for work conditions is recommended.
<b>Building Trades II</b> (11,12)	<i>Building Trades I Full Year 2 Periods</i>	This course is for students who want to further their experience in residential building trades. The hands-on building of the vocational school house project gives students the skills to become employable in construction and its many related fields. The class meets 2 hours daily at the building site to construct and complete a house. Students frame the structure, insulate and install siding. Drywall hanging and finishing, door and window installation, shingling, interior trim work, and deck building are also experienced. Clothing suitable for work conditions is recommended.

**MT. PLEASANT AREA TECHNICAL CENTER  
TRADE AND INDUSTRY OFFERINGS - ELECTRONICS**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Introduction to Computer Programming</b> (9,10,11,12)	<i>None</i> <i>1 Trimester</i>	Design and development of computer programs using Microsoft Visual Basic for Applications and Visual Basic Express 2008. The programming behind Microsoft Office applications and graphical user input forms are the core tools explored in this course. The student will acquire skills and samples that will be applied to solving problems with computers.
<b>Electronics &amp; Computer Installation &amp; Repair I</b> (10,11,12)	<i>None</i> <i>Full Year</i> <i>2 Periods</i>	<p>This course combines online training with hands-on classroom labs. Computer repair training is designed to prepare the student for Comptia A+ certification. The learner will work with installation, configuration and upgrade of computers hardware and operating systems. Computer programming skills using Microsoft VB 2005 and Parallax PBasic are included in this course.</p> <p>Car stereo systems are used to understand the basics of modern electronics with a focus on the skills required to become certified as a Mobile Electronics Certified Professional (MECP). The student will investigate the electronic components that are used in amplifiers, speakers, and car stereo equipment. This class is for students who like to know things like:</p> <ul style="list-style-type: none"> <li>• How do robots work?</li> <li>• What do all those specifications mean?</li> <li>• How can I repair a damaged circuit?</li> <li>• How do I repair or build a computer?</li> </ul> <p>A group project provides the opportunity to apply these skills. The career focus of this class is on learning the skills needed to be an Installer or Repair Technician.</p> <p><b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b></p>
<b>Electronics &amp; Computer Installation &amp; Repair II</b> (11,12)	<i>Electronics I</i> <i>Full Year</i> <i>2 Periods</i>	This course allows the students to work with more advanced equipment, components and circuits that support the students' career interests. Topics of study can include car audio, amplifier repair, robotics, computer interfacing, customization, digital and linear circuits, and industrial controls. The career focus of this course is on becoming skilled as an entry-level computer repair or electronics technician or for preparing for further study at the college level. Advanced students serve as project leaders for group projects.
<b>Electronics &amp; Computer Installation &amp; Repair III</b> (12)	<i>Electronics I &amp; II</i> <i>Full Year</i> <i>2 Periods</i>	This course offers advanced studies in the areas of electronics, robotics, computer operating systems, hardware and software. Student research is based on a highly independent and individual schedule.

**MT. PLEASANT AREA TECHNICAL CENTER**  
**TRADE AND INDUSTRY OFFERINGS – HEATING & PLUMBING**

Course Title Grade Level	Prerequisite Year Length	Content
<b>Exploratory Heating &amp; Plumbing</b> (9, 10, 11, 12)	<i>None</i> <i>1 Trimester</i>	This class introduces valuable home maintenance skills. Students will learn to repair and install sinks, faucets, showers, bathtubs, water heaters, and toilets; as well as perform minor furnace maintenance and pipefitting activities.
<b>Heating &amp; Plumbing</b> (10, 11, 12)	<i>None</i> <i>Full Year</i> <i>2 Periods</i>	This course is designed for the student who might be considering Heating and Plumbing as a career. This class will meet on a construction site to install the heating and plumbing systems. Upon completion, students will be able to enter on-the-job training programs, start apprenticeship training, or continue with schooling. Clothing suitable for work conditions is recommended.

**TRADE AND INDUSTRY OFFERINGS – INTERIOR DESIGN**

Course Title Grade Level	Prerequisite Year Length	Content
<b>Introduction to Interior Design</b> (9,10,11)	<i>None</i> <i>1 or 2 Trimesters</i>	This course introduces students to many areas of the home and its relation to space and activities. Basic home planning and the use of colors are explored. Students will experience matching fabrics, wall coverings, paints, carpets, tile, and other furnishings for clients. Skills such as painting techniques, building simple models, and beginning drafting of floor plans are used in fun and creative projects. Field trips to the vocational school house project will give the interested student an overview of what the two-hour block Interior Design I & II programs have to offer.
<b>Interior Design I</b> (10,11,12)	<i>None</i> <i>Full Year</i> <i>1 or 2 Periods</i>	A unique, creative outlet, this program is for the student interested in interior design. This course enables students to use their creativity in many types of drafted design projects such as dentist offices, studio apartments, and kitchens. Using internet research, students will keep current on the latest in design styles and proper application to their ongoing projects. Students use the skills learned in the classroom with hands-on experience at the school house project. Painting, hanging wallpaper, tiling, and hardwood floor installation are a few of the entry level skills students master for possible future careers in the interior design field. Portfolio readiness is also established. <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b> <b>*This course qualifies for Visual/Performing/Applied Arts Credit.</b>
<b>Interior Design II</b> (11,12)	<i>Interior Design I</i> <i>Full Year</i> <i>1 or 2 Periods</i>	Interior Design II offers the advanced student further development in their creativity and knowledge to complete design solutions based on the needs of people and the environment. This program sharpens the student's abilities in drafting, presentation techniques, barrier free design, and material selection and specifications. The students will also be involved in decision making and a second year of hands-on experience at the school house project. More extensive projects are completed with a total design concept practiced, such as a full service restaurant/lounge, a barrier-free residence, and the vocational house kitchen design. Beginning (CAD) Computer Aided Design is introduced. Job shadowing an interior design business is encouraged. Employability skills and design portfolios are refined to show each student's strengths. <b>*This course satisfies the 20 hours of online experience required by the new Michigan High School Merit Curriculum.</b> <b>*This course qualifies for Visual/Performing/Applied Arts Credit.</b>

*MT. PLEASANT AREA TECHNICAL CENTER*  
**TRADE AND INDUSTRY OFFERINGS – MACHINE TRADES**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Exploratory Metals</b> (9,10,11,12)	<i>None 1 Trimester</i>	This one trimester course introduces the students to the world of manufacturing. In this class the student will use various hand tools such as: the square, protractor, scales, micrometer, file, and hacksaw. They will also be introduced to arc and oxyacetylene welding, beginning drill press and engine lathe. Safety will be stressed in all areas of work. Skills learned will enable the students to continue in the manufacturing field.
<b>Machine Trades I</b> (10,11,12)	<i>None Full Year 1 or 2 Periods</i>	In this course the students will learn to use a variety of hand tools related to machine tool operations. They will set up and operate engine lathes, vertical milling machines, drill presses, cutoff-saws, and surface grinders. Other areas covered will be layout, precision measurement, shop math, basic computer aided machining, arc and oxyacetylene welding. Safety is stressed in all areas of work. Projects are designed to develop skills needed in the machine trades.
<b>Machine Trades II</b> (11,12)	<i>Machine Trades I Full Year 1 or 2 Periods</i>	This is an advanced course in machine trades with emphasis on problem solving and completion of individual projects. Advanced machine operations and set-ups along with electrical discharge machine operations, tool and cutter grinding, advanced computer aided machining. Projects are designed to develop skills in the machine trades.
<b>Machine Trades III</b> (11,12)	<i>Machine Trades II Full Year 2 Periods</i>	C.A.D./C.A.M. systems will be explored. Students will be exposed to advanced jig and fixture building and E.D.M. operations with projects. A simple plastic mold will be built. Basic working of a die will be covered.

*MT. PLEASANT AREA TECHNICAL CENTER*  
**TRADE AND INDUSTRY OFFERINGS – PRINTING/GRAPHICS**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Exploratory Graphic Arts</b> (9,10)	<i>None 1 Trimester 1 Period</i>	This is an exploratory course in Graphic Arts and Printing to introduce students to the various software used in desktop publishing and the production of printed products. Methods of printing include screen printing, heat transfer, dry point etching, vinyl cutting (stickers), laser engraving and offset printing. Digital photography and bookbinding will also be explored. Students will be introduced to elements of design using Adobe CS3 software (Photoshop, Illustrator, and InDesign) and will design a nameplate, business set, note pads, photo merge, package design, and screen printed t-shirts. This introductory class will focus on designing a product and taking it from start to finish so that the whole printing process is explored.
<b>Printing Technology /Visual Imaging I (Graphics I)</b> (10,11,12)	<i>None Full Year 1 or 2 Periods</i>	This dynamic program is a study of the various methods of reproducing images by printing, duplicating, screen printing, and photography. Emphasis is on the offset printing process and studies include computer copy preparation encompassing the use of desktop publishing software, scanners and laser printers, laser engraving, bindery, and the operation of various one, two, and four color offset presses, and process color production. This course is designed for students who have an occupational interest in the graphic arts, printing fields or commercial design.  <b>*This course qualifies for Visual/Performing/Applied Arts Credit.</b>
<b>Printing Technology /Visual Imaging II (Graphics II)</b> (11,12)	<i>Printing Technology /Visual Imaging I Full Year 1 or 2 Periods</i>	This program is an advanced study of offset printing processes including desktop publishing, computer composition of ruled forms, advertising layout, packaging design, brochure design, and complex copy. Students will learn large and small press operation and adjustment, process four-color work, as well as customer service in the student run production shop. Community service projects will be produced by advanced students. Estimating and production work on school printing needs will also be emphasized.  <b>*This course qualifies for Visual/Performing/Applied Arts Credit.</b>

**TRADE AND INDUSTRY OFFERINGS – RADIO/TELEVISION PRODUCTION**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Radio and Television Production I &amp; II</b> (10,11,12)	<i>None Full Year 1 or 2 Periods</i>	This course introduces students to the many aspects of Radio and Television Production. The class focuses on equipment operation, studio procedures, lighting, audio, digital editing, special effects and pictorial composition. Student projects include newscasts, commercials, public service announcements, interviews, variety shows and dramatic presentations. Students are encouraged to develop their own ideas. Production projects will be geared toward individual student's interests.

*MT. PLEASANT AREA TECHNICAL CENTER*  
**TRADE AND INDUSTRY OFFERINGS – RESIDENTIAL ELECTRICITY**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Exploratory Electricity</b> (9,10,11)	<i>None 1 Trimester</i>	This course is designed to introduce students to Electricity/Electronics and Computer Technology. Students will participate in hands-on activities making blinking lights and sound circuits, soldering, understanding computer hardware, and wiring household-type circuits. Investigation of consumer electronics, robotics, and car stereo systems will also take place based on student interest.
<b>Residential Electricity</b> (10,11,12)	<i>None Full Year</i>	This course is planned for study of the application of electricity to residential wiring. Students will study electrical materials, wiring layouts, tools, codes, basic circuits, and circuit testing methods. Students will be responsible for the actual wiring of the vocational school house project, as well as solve laboratory problems and complete research projects. Clothing suitable for work conditions is recommended.

**TRADE AND INDUSTRY OFFERINGS – SMALL ENGINE TECHNOLOGY**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Small Engines Technology I</b> (10,11,12)	<i>None Full Year 2 Periods</i>	This course is designed for students interested in learning to repair small engines and for those who are seeking jobs in the small engine field. This course will cover the operations involved in two stroke and four stroke engines, including ignition, carburetor, and exhaust systems. In addition, this class will develop troubleshooting skills and explore the customer relations side of the small engines field.
<b>Small Engines Technology II</b> (11,12)	<i>Small Engines Technology I Full Year 2 Periods</i>	This course will apply the skills acquired in Small Engines Technology I to real life situations. Students will work on customers' engines and communicate with the customers about the work being done on their equipment, enabling them to learn more about customer relations. Students will realize the meaning of team work by collaborating on projects. In addition, this class will explore two and four cycle high performance modifications. This course is a true test of a student's ability to survive and prosper in the world of small engines. Students seeking a third year enrollment in Small Engines must have permission of the instructor.

*MT. PLEASANT AREA TECHNICAL CENTER*  
**TRADE AND INDUSTRY OFFERINGS – TECHNICAL DRAFTING**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Exploring Drafting</b> (9,10,11,12)	<i>None 1 Trimester</i>	Any student interested in the engineering/design field should take the class. This class introduces students to the area of drafting and related design careers. Students will be exposed to basic drafting skills, machine parts, residential architecture, and basic C.A.D. (Computer Aided Drafting).
<b>C.A.D. /Technical Architectural Drafting I (Detailing)</b> (10, 11, 12)	<i>None Full Year 1 or 2 Periods</i>	This course is designed to develop the basic skills used in residential architecture. The course begins with room layout and progresses to residential home planning and detail. Students will have several opportunities to design and draw residential “working plans”. Computer Aided Drafting (C.A.D.) enhances the skills learned in Architectural Drafting and Technical/Architectural Drafting.
<b>C.A.D. /Technical Mechanical Drafting I (Detailing)</b> (10, 11, 12)	<i>None Full Year 1 or 2 Periods</i>	This is a course directly related to the field of mechanical drafting. This course is designed to strengthen basic drafting concepts. Emphasis is placed on detailing, and technical advancements in the engineering field. Computer Aided Drafting (C.A.D.) will enhance the skills learned in Machine Drafting and Technical/Mechanical Drafting.
<b>C.A.D. /Technical Architectural Drafting II (Design)</b> (11, 12)	<i>C.A.D. /Technical Architectural Drafting I Full Year 1 or 2 Hours</i>	This course includes an in-depth study of residential architecture and an introduction to small commercial buildings. Small commercial buildings such as offices, restaurants, and multi-family units are also designed individually or in teams, based on students’ goals and interests. Computer Aided Drafting (C.A.D.) is also introduced as another resource in cutting edge technical drafting. Residential homes, cottages, and commercial structures are some of the computer generated drawings students will master for competitive placement in the architectural field.
<b>C.A.D. /Technical Mechanical Drafting II (Design)</b> (11, 12)	<i>C.A.D. /Technical Mechanical Drafting I Full Year 1 or 2 Periods</i>	This course includes an in-depth study of mechanical detailing and design of machine processed parts. Building around design and production practices with emphasis placed on production drawings, standard parts, tolerances, and machine operations. Computer Aided Drafting (C.A.D.) is included to develop new skills and understanding of computer-generated drawings. Completion of this course provides the student with job-entry skills in the mechanical drafting field.

*MT. PLEASANT AREA TECHNICAL CENTER*  
**TRADE AND INDUSTRY OFFERINGS – WELDING**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Welding I</b> (11,12)	<i>None Full Year 2 Hours</i>	This introductory course offers the student the fundamentals of welding theory and practical experience in shielded metal arc welding, gas metal arc welding, flux cored arc welding, and gas tungsten arc welding of mild steel in the flat position. Oxyacetylene welding and brazing, oxyacetylene cutting, plasma arc cutting, air carbon-arc cutting, welding safety, welding metallurgy, joint design, and use of related hand tools and equipment will also be stressed.
<b>Welding II</b> (11,12)	<i>Welding I Full Year 2 Hours</i>	This course is designed to train students in entry level job skills. Theory and techniques in application of shielded metal arc welding, gas metal arc welding, flux cored arc welding, and gas tungsten arc welding of ferrous and non-ferrous alloys will be covered. Course work will include generating multi view drawings, interpreting welding drawings and weld symbols, and testing welds. Fabrication and repair work will serve as class projects. Students will be involved in layout, inspection, measurement, and design.

**WORK-BASED LEARNING**

<b>Course Title Grade Level</b>	<b>Prerequisite Year Length</b>	<b>Content</b>
<b>Capstone/ Cooperative Learning</b> (Co-op) (11, 12)	<i>See Placement Coordinator for requirements 1 or 2 Trimesters or Full Year</i>	The Co-op program is designed for juniors and seniors enrolled in one of the MPATC programs. This is an opportunity for students to practice classroom skills in a paid, part-time job that is related to their career path. The Placement Coordinator, classroom instructor, and workplace supervisor develop a training program for the student to follow.
<b>Work Experience</b> (12)	<i>See Placement Coordinator for requirements 1 or 2 Trimesters or Full Year</i>	The Work Experience program is designed for seniors looking to gain experience in a paid, part-time job that is related to their career path. The Placement Coordinator and workplace supervisor develop a training program for the student to follow.

**Please call (989) 775-2210 for more information.**



**Nondiscrimination Policy:** It is the policy of the Mt. Pleasant Public Schools not to discriminate on the basis of race, color, religion, natural origin, creed or ancestry, age, sex, height, weight, marital status, sexual orientation or disability in educational programs, activities or services and to comply with all requirements and regulations of the United States Department of Education. In addition, arrangements can be made to ensure that the lack of English language skills is not a barrier to admission or participation. Questions or concerns regarding compliance with this policy may be directed to the: Assistant Superintendent for Human Resources at Mt. Pleasant Public Schools, 720 N. Kinney Ave., Mt. Pleasant, MI 48858, (989) 775-2303